

5

# **Notice of Allowability**

Application No.

09/882,413

Examiner

Man Phan

Applicant(s)

LI, SHUO-YEN ROBERT

Art Unit

2616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed 1/5/2007.
2. ☒ The allowed claim(s) is/are 4-11 (Claims are renumbered as 1-8 respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## **Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Reasons for allowance*

1. This communication is in response to applicant's 01/05/2007 amendment in the application of Li for a "Multicast concentrators" filed 06/15/2001. This application claims Priority from Provisional Application 60212333 filed 06/16/2000. The proposed amendments has been entered and made of record. Applicant's response with regard to the rejection are persuasive. The terminal disclaimer filed on 01/05/2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 7,106,728 filed 05/01/2000; 7,079,532; 6,999,466 and 7,065,073 filed 06/15/2001 have been reviewed and accepted. The terminal disclaimer has been recorded. Applicant's argument and explanation with regard to the rejection under 35 USC 103 are persuasive. The claims have been amended to better point out and more distinctly claim subject matter comprising the invention.

2 Claims 4-11 are allowable as evident by applicant's amendment (claims are renumbered as 1-8 respectively).

3. The following is an examiner's statement of reasons for allowance: The instant application is deemed to be directed to a nonobvious improvement over the invention patented in closest prior arts of record. The improvement comprises the m input ports to receive the input signals, m output ports partitioned into two groups wherein m-n of the m output ports are grouped as a O-output group and the remaining n output ports are grouped as a 1-output group, and means, including at least one bicast cell, responsive to the input signals, for routing the

Art Unit: 2616

maximum possible total number of 0-bound and bicast ones of the input signals to the 0-output group and the maximum possible total number of 1-bound and bicast ones of the input signals to the 1-output group; wherein the total number of the input signals is  $m$ , among which the number of 0-bound signal is  $x_0$ , the number of 1-bound signals is  $x_1$ , the number of bicast signals is  $x_b$ , and the number of idle signals is  $m - x_0 - x_1 - x_b$ , the maximum possible total number of 0-bound and bicast ones of the input signals routed to the 0-output group of the concentrator is  $\min\{m - n, x_0 + x_b\}$ , and the maximum possible total number of 1-bound and bicast ones of the input signals routed to the 1-output group of the concentrator is  $\min\{n, x_1 + x_b\}$ , as specifically recited in the claims; wherein the 0-bound input signals are classified into  $r_0$  priority classes,  $r_0 > 1$ , and the 1-bound input signals are classified into  $r_1$  priority classes,  $r_1 > 1$ , and the means for routing includes means for routing the maximum possible total number of 0-bound and bicast ones of the input signals according to the priority classes of the 0-bound input signals to the 0-output group and the maximum possible total number of 1-bound and bicast ones of the input signals according to the priority classes of the 1-bound input signals to the 1-output group, as specifically recited in claims.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2616

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Man U. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached Monday through Friday from 6:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

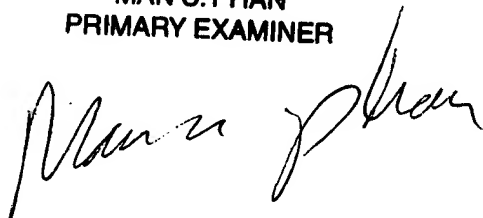
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

MPhan

03/12/2007

MAN U. PHAN  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Man U. Phan', is written over the printed name and title.